SEQUENCE LISTING

<110> O'Keefe, Theresa
Rao, Pat

<120> HYBRID ANTIBODIES AND USES THEREOF

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<150> 60/265,914
<151> 2001-02-02

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1 5 10 15
Gly

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Phe Arg Gln Tyr Ser Gly Gly Phe Asp Tyr
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Ser Met Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
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Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys Ser Arg
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Trp Gly Gln Gly Thr Thr Val Thr Val Ser
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<213> Rattus norvegicus

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<213> Rattus norvegicus

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Trp Tyr Gln Gln Arg Pro Gly Arg Ala Pro Thr Leu Val Ile Phe
 1   5   10   15

<210> 13
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<212> PRT
<213> Rattus norvegicus

<400> 13
Gly Val Pro Asp Arg Phe Ser Gly Ser Ile Asp Arg Ser Ser Asn Ser
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Ala Ser Leu Thr Ile Ser Gly Leu Gln Thr Glu Asp Glu Ala Asp Tyr
            20   25   30
Tyr Cys

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<213> Rattus norvegicus

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Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 1   5   10

<210> 15
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<212> PRT
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<220>
<223> Synthetically generated peptide

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Asp Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
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Thr Val Ile Ile Ser Cys Thr Leu Ser Ser Gly Asn Ile Glu Asn Asn
            20   25   30
Tyr Val His Trp Tyr Gln Gln Arg Pro Gly Arg Ala Pro Thr Leu Val
        35   40   45

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Ile Phe Asp Asp Asp Lys Arg Pro Asp Gly Val Pro Asp Arg Phe Ser
    50                  55                  60
Gly Ser Ile Asp Arg Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
65                  70                  75                  80
Leu Gln Thr Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Tyr Val Ser
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Ser Phe Asn Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
            100                 105                 110
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aca gtc att att tct tgc aca ctc agc tct ggt aac ata gaa aac aac       96
Thr Val Ile Ile Ser Cys Thr Leu Ser Ser Gly Asn Ile Glu Asn Asn
             20                  25                  30

tat gtg cac tgg tac cag caa agg ccg gga aga gct ccc acc ctc gtg      144
Tyr Val His Trp Tyr Gln Gln Arg Pro Gly Arg Ala Pro Thr Leu Val
         35                  40                  45

att ttc gat gat gat aag aga ccg gat ggt gtc cct gac agg ttc tct      192
Ile Phe Asp Asp Asp Lys Arg Pro Asp Gly Val Pro Asp Arg Phe Ser
     50                  55                  60

ggc tcc att gac agg tct tcc aac tca gcc tcc ctg aca atc agt ggt      240
Gly Ser Ile Asp Arg Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
 65                  70                  75                  80

ctg caa act gaa gat gaa gct gac tac tac tgt cat tct tat gtt agt      288
Leu Gln Thr Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Tyr Val Ser
                85                  90                  95

agt ttt aat gtt ttc ggc ggt gga aca aag ctc act gtc ctt              330
Ser Phe Asn Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
            100                 105                 110
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<210> 17
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<400> 17

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            20                  25                  30
Pro Met Ala Trp Val Arg Gln Ala Pro Lys Lys Gly Leu Glu Trp Val
        35                  40                  45
Ala Thr Ile Ser Thr Ser Gly Gly Arg Thr Tyr Tyr Arg Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Ser Ile Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
                85                  90                  95
Ser Arg Phe Arg Gln Tyr Ser Gly Gly Phe Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Thr Val Thr Val Ser Ser
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<212> DNA
<213> Rattus norvegicus

<220>
<221> CDS
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 1               5                  10                  15

tcc atg aaa ctc tcc tgt gca gcc tca gga ttc act ttc agt agc ttt      96
Ser Met Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
            20                  25                  30

cca atg gcc tgg gtc cgc cag gct cca aag aag ggt ctg gag tgg gtc     144
Pro Met Ala Trp Val Arg Gln Ala Pro Lys Lys Gly Leu Glu Trp Val
        35                  40                  45

gca acc att agt act agt ggt ggt aga act tac tat cga gac tcc gtg     192
Ala Thr Ile Ser Thr Ser Gly Gly Arg Thr Tyr Tyr Arg Asp Ser Val
    50                  55                  60

aag ggc cga ttc act atc tcc aga gat aat ggg aaa agc atc cta tac     240
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Ser Ile Leu Tyr
65                  70                  75                  80

ctg caa atg aat agt ctg agg tct gag gac acg gcc act tat tac tgt     288
Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
                85                  90                  95

tca aga ttt cgg cag tac agt ggt ggc ttt gat tac tgg ggc caa ggg     336
Ser Arg Phe Arg Gln Tyr Ser Gly Gly Phe Asp Tyr Trp Gly Gln Gly
            100                 105                 110

acc acg gtc acc gtc agc tca                                        357
Thr Thr Val Thr Val Ser Ser
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<212> DNA
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<210> 21
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<212> DNA
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<210> 23
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<212> DNA
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<400> 23
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<212> PRT
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35 40 45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80
Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95
Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
130 135 140
Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160
Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175
Glu Gln Tyr Ala Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
195 200 205
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
245 250 255
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Lys Ser Leu
290 295 300
Ser Leu Ser Pro Gly Lys
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<212> DNA
<213> Homo sapiens

<220>
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agc acc tct ggg ggc aca gcg gcc ctg ggc tgc ctg gtc aag gac tac 96
Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30

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ttc ccc gaa ccg gtg acg gtg tcg tgg aac tca ggc gcc ctg acc agc      144
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45

ggc gtg cac acc ttc ccg gct gtc cta cag tcc tca gga ctc tac tcc      192
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
    50                  55                  60

ctc agc agc gtg gtg acc gtg ccc tcc agc agc ttg ggc acc cag acc      240
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80

tac atc tgc aac gtg aat cac aag ccc agc aac acc aag gtg gac aag      288
Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95

aaa gtt gag ccc aaa tct tgt gac aaa act cac aca tgc cca ccg tgc      336
Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
            100                 105                 110

cca gca cct gaa ctc ctg ggg gga ccg tca gtc ttc ctc ttc ccc cca      384
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
        115                 120                 125

aaa ccc aag gac acc ctc atg atc tcc cgg acc cct gag gtc aca tgc      432
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
    130                 135                 140

gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc aag ttc aac tgg      480
Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145                 150                 155                 160

tac gtg gac ggc gtg gag gtg cat aat gcc aag aca aag ccg cgg gag      528
Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
                165                 170                 175

gag cag tac gcc agc acg tac cgt gtg gtc agc gtc ctc acc gtc ctg      576
Glu Gln Tyr Ala Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
            180                 185                 190

cac cag gac tgg ctg aat ggc aag gag tac aag tgc aag gtc tcc aac      624
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
        195                 200                 205

aaa gcc ctc cca gcc ccc atc gag aaa acc atc tcc aaa gcc aaa ggg      672
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
    210                 215                 220

cag ccc cga gaa cca cag gtg tac acc ctg ccc cca tcc cgg gat gag      720
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225                 230                 235                 240

ctg acc aag aac cag gtc agc ctg acc tgc ctg gtc aaa ggc ttc tat      768
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
                245                 250                 255
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ccc agc gac atc gcc gtg gag tgg gag agc aat ggg cag ccg gag aac 816
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270

aac tac aag acc acg cct ccc gtg ctg gac tcc gac ggc tcc ttc ttc 864
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285

ctc tac agc aag ctc acc gtg gac aag agc agg tgg cag cag ggg aac 912
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300

gtc ttc tca tgc tcc gtg atg cat gag gct ctg cac aac cac tac acg 960
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305 310 315 320

cag aag agc ctc tcc ctg tct ccg ggt aaa tga 993
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
325 330